



SECTION A

1. Work out: $233 + 77$

2. Write CDL in Hindu Arabic numerals.

3. How many elements are in a set which has 31 proper subsets?

4. Simplify: $k - 3k + 7k$

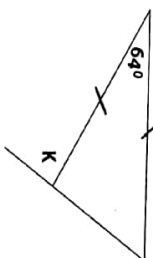
5. Express 720,000 in standard form.

6. Represent 1:30 on a clockface below.



7. A quarter a dozen of books costs sh.4,500. Find the cost of 5 books.

8. What is the size of angle k on the diagram below.



9. Simplify: $12 + -8$

10. Calculate the circumference of a circle whose radius is 5dm (Take $\pi = 3.14$)

11. Express $2\frac{1}{2}\%$ as a fraction in its simplest form.

12. Isa can drive at a speed of 72km/hr. Express his speed in metres per second

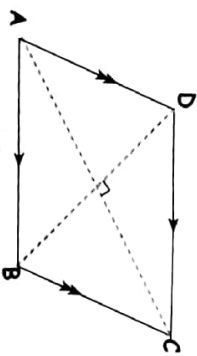
13. The cost of a phone in country X is three times the cost of the same phone in country Y. The difference in costs is sh 30,000. Find the cost of that phone in country Y.

14. Using a ruler and a pair of compasses only, construct an angle of 105°

15. Find the median score of the following scores: 7, 3, 4, 9, 10, 4, 5, 10

SECTION B

16. a) The figure below is a rhombus ABCD, where $AC = 24\text{cm}$ and $BD = 10\text{cm}$. Find length AB.



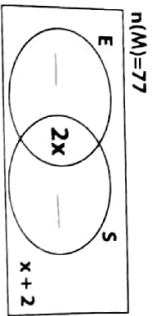
b) Find the area of the rhombus.

17. 480 pupils and their 24 teachers went to a restaurant. Each person was served lunch at a cost of sh. 12,500 and a bottle of soda at sh. 2000. (a) How much money did they pay for lunch and soda altogether?

- (b) If they used buses to go for the tour, each carrying 42 people, how many buses were used?

18. In a class of 77 pupils, all of them like Mathematics (M), 40 like also English (E), $2x$ like all the three subjects, $5x+5$ like Science (S) and Mathematics only but $(x+2)$ like Mathematics only.

- (a) Use the above information to complete the Venn diagram drawn below.



- (b) Find the value of x .

- (c) How many pupils like both Mathematics and Science?

19. a) Using a pair of compasses, a ruler and a pencil only, construct a triangle ABC, where $AB = 6\text{cm}$, $BC = 8\text{cm}$ and angle $ABC = 90^\circ$.

- (b) Measure $AC =$ _____ cm.

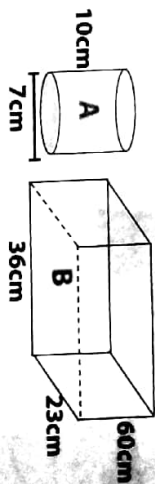
20. The exchange rate at ZIKE forex bureau are as follow:

- 1 British pound sterling (£) = Ug sh 4400
 1 Euro (€) = Ug sh 3800
 1 Kenya shilling (K.Sh) = Ug sh 35
 a) Convert Ug sh 2,600,000 to British pound sterling.

- b) If a radio costs € 105, find its equivalent cost in Kenya shillings.

21. If $\frac{1}{2}$ of the food bought was eaten on Monday $\frac{1}{4}$ of the remainder eaten on Tuesday, and the left 24kg was eaten on Wednesday, How many kg of food were bought altogether?

22. Tin (A) was used to draw milk from rectangular tank (B).



- a) How many full tins (A) of milk were drawn from tank B? (Take $\pi = \frac{22}{7}$)

- b) Calculate the volume of milk left in tank B.

23. The interior angle of a regular polygon is 36° more than the exterior angle.

- (a) How many sides has the polygon?

- (b) Work out the interior angle sum of the polygon.